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Docket No.: 1454.1200

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Anja KLEIN ET AL.

Serial No. 09/530,386

Group Art Unit: 2684

Confirmation No. 7374

Filed: April 27, 2000

Examiner: Nguyen, Tu X

For: METHOD, MOBILE STATION AND BASE STATION FOR CONNECTION SETUP IN A RADIO COMMUNICATION SYSTEM

APPEAL BRIEF UNDER 37 C.F.R. §§ 1.191 AND 1.192

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Commissioner for Patents  
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Sir:

Entry of this Appeal Brief, and corresponding Notice of Appeal, is respectfully requested after entry of the concurrently filed Amendment.

Thus, pursuant to the Appellant's concurrently filed Notice of Appeal, Appellants hereby appeal to the Board of Patent Appeals and Interferences from the Final Office Action, mailed May 21, 2004 (paper no. 23).

Appellant submits this Appeal Brief in triplicate as required by 37 C.F.R. §1.192(a) along with the filing fee of \$330.00 set forth in 37 C.F.R. §1.17(f).

I. Real Party in Interest

Pursuant to 37 C.F.R. §1.192(c)(1), due to the assignment executed on October 6, 1998, by inventor Anja Klein, October 14, 1998, by inventor Michael Färber, and October 21, 1998, by inventor Christian Lüders, and submitted for recordation with the United States Patent and Trademark Office with the initial filing, the real party in interest is as follows:

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## II. Related Appeals and Interferences

Pursuant to 37 C.F.R. §1.192(c)(2), although the real party in interest has other appeals and interferences, none of the other pending appeals and interferences is believed to directly affect or be directly affected by, or have any bearing upon the decision of the Board of Patent Appeals and Interferences in this appeal.

## III. Status of Claims

Pursuant to 37 C.F.R. §1.192(c)(3), claims 18-21 and 24-35 are pending in this application at the filing of this Appeal Brief. Claims 18-21 and 24-35 have at least been twice rejected. Claims 18, 33, 34, and 35 are independent claims, and claims 19-21 and 24-32, are dependent claims.

Claims 1-17 were originally filed in the application, and canceled with a Preliminary Amendment, which added claims 18-34. An Office Action was issued on July 20, 2002, rejecting claims 18-34. In response thereto, an Amendment was filed October 30, 2002, canceling claim 23 and amending independent claims 18, 33 and 34. Claims 18-22 and 24-34 were again rejected in the Office Action issued January 13, 2004, which was responded to by Applicants with a response requesting reconsideration of the allowability of the claims on May 13, 2004. An Advisory Action was issued June 4, 2003, and responded to by a Request for Continued Examination (RCE) and Amendment on July 14, 2003.

Subsequently, an Office Action was issued September 3, 2003, presenting rejections based on new references, which have essentially been maintained in the outstanding Office Action. An amendment to the independent claims was filed December 3, 2003. The rejection was made final in the Office Action mailed January 20, 2004, followed by an After Final Amendment on March 11, 2004, amending the independent claims, an Advisory Action issued March 30, 2004, and an RCE on April 9, 2004. The outstanding Office Action was subsequently issued on May 21, 2004, with similar rejections as in the September 3, 2003, Office Action, but with the addition of a new reference.

#### IV. Status of Amendments

Pursuant to 37 C.F.R. §1.192(c)(4), and as noted above, pending claims 18-21 and 24-34 were amended with an Amendment filed concurrently with the present Appeal Brief. Entry of the Amendment was requested before entry of the Notice of Appeal and Appeal Brief. Claim 35 was last amended in the Amendment filed March 11, 2004, and entered April 9, 2204, with the Request for Reconsideration (RCE) filed the same day.

Pursuant to 37 C.F.R. §1.192(c)(9), a copy of the pending claims is included in their present condition in the Appendix.

#### V. Summary of the Invention

Pursuant to 37 C.F.R. §1.192(c)(5), embodiments of the present invention are directed toward apparatuses and methods for improved connection setups in radio communication systems between a base station and a mobile station.

As noted in the Abstract of the present application, when the base station recurrently offers frequency channels for a random access for mobile stations in an upstream direction, the mobile station can request a connection setup with the base station by measuring a reception power of a signal sent in a downstream direction by the base station and sets a transmission power for sending an access radio block to the base station dependent on the measured reception power. A variable transmission power control can thus be implemented at the mobile station side with the assistance of the measured reception power of the signal transmitted on the part of the base station, being also capable of being implemented for random access of the mobile stations.

The present application also noted that previously, when base stations offered frequency channels for random access, mobile stations were required to send access blocks with maximum transmission power, because the transmission conditions were not yet known at the transmitter side and to assure that a mobile station located at the edges of the radio cell that transmits an access radio block generates a signal at the base station that is strong enough for detection. See the present application on page 1, line 25, through page 2, line 5. However, when two or more stations would attempt to actuate the random access in the same time slot and frequency band, radio blocks with lower in power would not be capable of being interpreted and would have to be re-transmitted at a later point in time by the affected mobile stations. Further, when two or more signals having nearly the same power intensity levels arrive at the base station, both signals may possibly be detected and must be reinitiated. In addition, by permitting mobile stations to transmit at less than a maximum power level potential interferences between mobile stations can be reduced.

## VI. Issues

1. Whether claims 18-20, 24-29, and 33-35 are patentably distinct over Jolma et al., U.S. Patent 5,806,003, in view of Gardner et al., U.S. Patent No. 5,729,557, and Hayashi et al., U.S. Patent No. 6,069,884, and Oberholtzer et al., U.S. Patent No. 5,465, 399.

2. Whether dependent claim 21 is patentably distinct over the combination of Jolma et al., Gardner et al., Hayashi et al., and Oberholtzer et al., in view of Gilhousen et al., U.S. Patent No. 5,485,486.

3. Whether dependent claim 30 is patentably distinct over the combination of Jolma et al., Gardner et al., Hayashi et al., and Oberholtzer et al., in view of Bender et al., U.S. Patent No. 6,366,779.

## VII. Grouping of Claims

Pursuant to 37 C.F.R. §1.192(c)(7), the claims are grouped as follows:

1. Independent claims 18 and 33-34 stand and fall together;
2. Independent claim 35 stands and falls alone; and
2. Dependent claims 19-21 and 24-32 are argued together but stand and fall separately.

## VIII. Argument

1. Independent claims 18 and 33-35 are patentably distinct from Jolma et al., Gardner et al., Hayashi et al., and Oberholtzer et al., alone or in combination.

By way of review and as an example, independent claim 18 sets forth:

"[a] method for connection setup for mobile stations of a radio communication system having at least one base station, comprising:

recurrently offering frequency channels for a random access in an upstream direction for the mobile stations;

in the mobile station that requests a connection setup, measuring a reception power of a signal sent from the base station in a downstream direction; and

in the mobile station, setting a transmission power dependent on the measured reception power for sending an access radio block to the base station,

wherein codes are used to separate information of different connections between the base station and mobile stations,

wherein if the access radio block, sent to the base station, has not been successfully detected by the base station, a new access radio block is sent by the mobile station with increased power, and

wherein the signal transmitted in the downstream direction is a pilot signal."

The outstanding Office Action (Office Action) sets forth that Jolma et al. sets forth all the claimed features except for the claimed sending of an access radio block to the base station, that codes are used to separate information connections between the base station and mobile stations, and the sending of a new access radio block by the mobile station with increased power if the access radio block has not been successfully detected. See page 3 of the Office Action. It is also noted that independent claims 1, 33 and 34 have been amended to include the feature that the signal transmitted in the downstream direction is a pilot signal, which the Office Action has also indicated Jolma et al. failed to disclose. See page 4 of the Office Action.

To disclose the claimed sending of the access radio block to the base station the Examiner has cited Gardner et al. as setting forth the sending of an access block to a base station, and summarily concludes that the addition of this feature to Jolma et al. would have been obvious "in order to provide power transmission in different code rates and applying convolutional codes to data having a block structure."

Similarly, to add the claimed use of codes to separate information of different connections between the base station and mobile stations to the combination of Jolma et al. and Gardner et al. the Examiner points out that Hayashi et al. sets forth the use of codes to separate information connections between a base station and mobile stations. Again, the Examiner summarily concludes that this addition would have been obvious "in order to provide differentially-coding information indicative of one of plurality of antennas to be used."

Likewise, the Examiner has cited Oberholtzer et al. as disclosing the sending of a new access radio block by the mobile station with increased power if the access radio block was not detected successfully, and concludes the addition of this feature to the combination of Jolma et al., Gardner et al., and Hayashi et al. "in order to provide variable transmission power capability to ensure reliable communications between receivers."

Further, as independent claims 18, 33 and 34 include the feature of the signal transmitted in the downstream direction is a pilot signal, it is noted that to disclose this feature the Examiner has merely relied upon Hayashi et al. as disclosing the same. Thus, without any obviousness analysis, the Examiner, in the previous rejection of claim 22, merely added that feature to the aforementioned combination of Jolma et al., Gardner et al., and Hayashi et al., and the Examiner would presumably similarly argue that the addition of this feature to the combination of Jolma et al., Gardner et al., Hayashi et al., and Oberholtzer without analysis, merely because the argument for adding the previous feature of Hayashi et al. has been made, i.e., no obviousness argument has been made for the addition of the pilot signal feature since the Examiner appears to believe it not necessary with a previous feature of Hayashi et al. having already been combined with Jolma et al. and Gardner et al.

Regardless, the above are merely examples of the outstanding rejection obviousness rationales. The Examiner has cited which features are missing from the primary reference, or the already modified primary reference, cites a reference disclosing that feature, and concludes that the combination is obvious for some undocumented benefit. The rejections fail to evidence where the cited motivation is supported in the record, how it is applicable to the primary or modified primary reference, or why it is even relevant and/or needed/desired with the primary or modified primary reference. The rejections all would appear to fail to properly set forth a prima facie obviousness case.

As commonly understood, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art..."[the Examiner] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." In re Fritch, 23 USPQ 2d 1780, 1783 (Fed. Cir. 1992).

The Examiner is required to present actual evidence and make particular findings related to the motivation to combine the teachings of the references. In re Kotzab, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000); In re Dembiczak, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Further, the Examiner must explain the reasons that one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious. In re Rouffet, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998). Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence." Dembiczak, 50 USPQ2d at 1617.

Further, it is well settled that "the Board [and Examiner] cannot simply reach conclusions based on [their] own understanding of experience - or on [their] assessment of what would be basic knowledge or common sense. Rather the Board [and Examiner] must point to some concrete evidence in the record in support of these findings." In re Zurko, 258 F. 3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). See also In re Lee, 277 F. 3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002), in which the court required evidence for the determination of unpatentability by clarifying that the principles of "common knowledge" and "common sense" may only be applied to the analysis of evidence, rather than be a substitute for evidence. The court has also recently expanded their reasoning on this topic in In re Thrift, 298 F. 3d 1357, 1363, 63 USPQ2d 2002, 2008 (Fed. Cir. 2002).

Thus, accordingly, a prima facie obviousness rejection requires evidenced motivation from something in the record that would lead one skilled in the art to combine the relevant teachings, noting that the mere fact that the prior art may be modified in a particular manner does not make the modification obvious unless the prior art suggested the desirability of that modification.

Accordingly, the aforementioned rejection rationales are improper. The Examiner has failed to evidence where the recited motivation is supported by the record, and more importantly, the Examiner has failed to relate the recited motivation the underlying primary or modified primary reference. The rejections would appear to merely recite a benefit the Examiner discerned from a feature in a secondary reference and summarily concluded that it would have been obvious to add that feature to the primary or modified primary reference for this discerned benefit without any analysis of whether that benefit is relevant to the primary or modified primary reference, whether that benefit is applicable to the primary or modified primary reference, or whether the corresponding teaching in that secondary reference would therefore lead one skilled in the art to incorporate the same feature into the primary or modified primary reference or solve a similar problem in the primary or modified primary reference. The rejections fail to present any corresponding analysis required in a prima facie obviousness case.

Further to the inadequacies of the outstanding rejections, Applicants have routinely presented multiple technical discussions as to why one skilled in the art would not have made the proffered modification or combination. The lack of the Examiner to respond to the particular non-obviousness remarks has been pointed out to the Examiner previously.

It was noted to the Examiner that, according to MPEP 707.07(f), a failure of the Examiner to address the applicant's traversals can be deemed a failure to rebut these arguments so as to admit that the arguments have overcome the rejection. At the very least, the failure to address the applicant's traversals would render the Examiner's decision to again reject the claims arbitrary and capricious and invalid under the Administrative Procedures Act, 5 U.S.C. § 706, the standard under which such rejections are reviewed in view of Dickinson v. Zurko, 527 U.S. 150, 50 USPQ2d 1930 (1999). In response to particular technical discussions pointing out why the proffered combinations would not have been obvious the Examiner has rather relied on the Examiner's recited motivation and not rebutted the technical merits of Applicants remarks.

Thus, though Applicants' technical remarks should appear to have been admitted by the Examiner, the following additional comments are presented identifying why purported combinations would not have been obvious.

First, it is respectfully submitted that it would not have been obvious to incorporate the Office Action purported feature of using codes to separate information connections between the base station and mobile stations, from Hayashi et al., into the modified Jolma et al.

Essentially, to Office Action purported feature in Hayashi et al. of information of different connections being spread with individual codes relates to CDMA architecture, while the previously modified Jolma et al., in view of Gardner et al., is of a GSM architecture.

Specifically, Jolma et al. pertains to a GSM system, while Hayashi et al. pertains to a CDMA system, whereby the base station possesses a plurality of transmit antennas. Hayashi et al. deals with the sending of signals via the plurality of antennas and receiving and handling the signals at the mobile.

However, it is generally known that GSM systems, in principle, do not use a plurality of transmit antennas. Thus, one skilled in the art of GSM systems (after reviewing the disclosure of Jolma et al.) would not look to the disclosure of Hayashi et al. See FIG. 1 of Jolma et al. compared to FIG. 1 of Hayashi et al., where these clear differences are illustrated.

In addition, the emphasis in Jolma et al. is on a signal being sent from a mobile to the base station, namely on the Channel Request Message of the mobile (and thereafter on a message from the mobile to the base station about the power level used by the mobile for transmitting the channel request, see claim 1 in Jolma et al.).



In contrast, Hayashi et al. is directed toward signals being sent from the base station to the mobile. Essentially, Jolma et al. is directed toward the "uplink" while Hayashi et al. is directed toward the "downlink." As detailed in the MPEP, where one reference is directed in one direction, and a suggested modification of the same would change the direction of the primary reference, the motivation to still make such a combination is quite lessened. Similarly, here with Jolma et al. being directed to the uplink, and all the associated problems thereof, it would not have been obvious to radically change Jolma et al., as suggested in the Office Action.

Further, in another point against the Office Action suggested modification of Jolma et al., Jolma et al. details the process of a call establishment, while Hayashi et al. pertains to signals in the course of a communication between a mobile and a base station.

However, it is well known that the first phase of a communication, which includes the establishment of the connection, has to follow particular rules and is subject to restrictions strictly different from the rest of the communication. In principle, procedures used in the course of a communication cannot be applied to the first phase of the establishment of the connection.

Therefore, one skilled in the art, and familiar with call establishments, would not have looked to Hayashi et al., as suggested in the Office Action, to modify the Jolma et al. call establishment method. The Examiner has previously responded to these particular technical arguments by merely countering that the underlying combinations are proper since both references are directed in the same field, i.e., two way communication, for example. The entire substance of Applicants' arguments would appear to have been dismissed without discussion.

The Examiner's argument that the obviousness arguments are proper since both references deal with two-way communication and because both references are wireless data signal connection oriented, does not refute or counter the aforementioned detailed non-obviousness evidence. Regardless, it is respectfully submitted that one skilled in the art would not have made the purported combination.

Further, as noted above, the independent claims include a feature that if the access radio block, sent to the base station, has not been successfully detected by the base station, a new access radio block is sent by the mobile station with increased power. An example of this feature can be found discussed in the filed specification on page 6, line 7, through page 7, line 5.

In a previous response it was pointed out that Jolma et al. failed to address the problem of the base station not having received the signal sent by the mobile station. In fact, in Jolma et al., the calculation of the mobiles transmission power (col. 4, lines 33-39) aims at providing for the base station being able to successfully detect the mobiles signal for sure. Thus, the aforementioned new feature amounted to a solution of a problem neither disclosed or suggested by Jolma et al.

In response, the Examiner has cited Oberholtzer et al. to disclose this feature and argues that it would have been obvious to add the same to the combination of Jolma et al., Gardner et al., and Hayashi et al. "in order to provide variable transmission power capability to ensure reliable communication between transceivers." Similar to above, there is no particular support in the record for the applicability of this motivation or it's applicability to the Jolma et al. combination.

Regardless, it is respectfully submitted that it would not have been obvious to add this feature from Oberholtzer et al. to the Jolma et al. combination.

To initially establish a connection, Oberholtzer et al. uses a default transmit power level. Oberholtzer et al. in col. 7, lines 14-17. If no stations respond to the transmissions at this transmit power, the transmit power level of the station is incrementally increased in steps. Oberholtzer et al. in col. 7, lines 17-21. This means that the station of Oberholtzer et al. cannot chose its transmit power level, but must use some prescribed level which is the default transmit power. As the initial transmit power can accordingly not be adapted to a current circumstances of the station, it can not determine whether the signal of the station will be received. To make sure the signal will be received, the station increases its transmit power if there is no answer to its signal. To summarize: in Oberholtzer et al., increasing the transmit power serves as a security mechanism for ensuring the reception of the signal of the Oberholtzer et al. station.

Jolma et al. already includes a mechanism to ensure the reception of the mobile station's signal, namely a certain calculation performed by the mobile of the transmit power to be applied by the mobile, described in Jolma et al. in col. 4, lines 33-39. The calculation of the mobile's transmit power makes sure that the signal sent from the mobile knows the attenuation on the radio path from the base station to the mobile station and adds this attenuation to its described power level.

By combining Jolma et al. and Oberholtzer et al., the Examiner is adding the Oberholtzer et al. security mechanism to a system (Jolma et al.) which already has a working security mechanism. In this case, one skilled in the art would not have added the additional security mechanism to Jolma et al., i.e., Jolma et al. does not need the cited feature of Oberholtzer et al.

Further, it is respectfully submitted that one skilled in the art, looking at Jolma et al. with the aim of modifying Jolma et al. to make sure a signal from the mobile station will be received at the base station, would actually proceed as follows: instead of calculating the transmit power by simply adding together the attenuation and the desired power level, one skilled in the art would add up the attenuation and the desired power level and some secondary margin. Regardless, even this potential modification of Jolma et al. would not disclose the presently claimed invention.

Thus, in addition to the outstanding obviousness rejections failing to properly set forth prima facie obviousness cases, it is further respectfully submitted that one skilled in the art would not have made the Examiner's proffered combinations.

Therefore, it is respectfully submitted that independent claims 18 and 33-35 are patentably distinct from Jolma et al., Gardner et al., Hayashi et al., and/or Oberholtzer et al., alone or in combination.

2. Dependent claims 19-21 and 24-32 are patentably distinct over Jolma et al., Gardner et al., Hayashi et al., and Oberholtzer et al., even in view of either Gilhousen et al. or Bender et al., alone or in combination.

It is respectfully submitted that dependent claims 19-21 and 24-32 are patentably distinct from Jolma et al., Gardner et al., Hayashi et al., and Oberholtzer et al., at least for the above remarks regarding the distinct status of independent claim 1. Further, neither Gilhousen et al. or Bender et al. disclose the same deficiencies.

Further, the obviousness rejections of claims 19, 26-27, 21, and 30, similar to above, would appear to merely recite the missing feature, where that feature can be found, and conclude it obvious to add that feature for unsupported motivation.

Similar to above, rather than providing a prima facie obviousness analysis, the Examiner would appear to be merely picking and choosing which features to add to Jolma et al. to build the presently claimed invention, without proper regard for the required motivational link between Jolma et al., the recited motivation, and the secondary reference providing the missing feature.

In addition, it was pointed out in the last response that some rejections merely recited what features could be found in secondary references, as support for disclosing claimed features in a proffered combination. The same rejections would appear to have merely been repeated in the outstanding Office Action.

However, features in the secondary references do not automatically transfer with the proffered combination merely because another feature from that secondary reference was also combined with a primary reference. Each proffered feature from secondary references must be supported by a prima facie obviousness case for that feature to be combined with the already modified primary reference. For example see the present rejections of claims 24 and 28-29.

Further, in some of the rejections the Examiner has indicated that certain features are inherent, which would appear to fail to support a prima facie obviousness case.

"[W]hen an examiner relies on inherency, it is incumbent on the examiner to point to the 'page and line' of the prior art which justifies an inherency theory." Ex parte Schricker, 56 USPQ2d 1723 (BdPatApp&Int 2000). Thus, the Examiner must at least point to something in the reference which has convinced the Examiner that such inherent features are included in the reference.

For example, on page 5 of the Office Action, regarding dependent claim 31, the Office Action indicates that since "the modified Jolma et al. do not mention about the access radio block is spread. Therefore, it is inherently that the access radio block is not spread." This conclusion lacks support, since merely because a reference does not indicate "something"; doesn't mean that "something" isn't actually there. Further, such an inherency argument should be supported by page and line numbers, i.e., col. and line numbers.

Further, in the rejection of claim 26-27, the Office Action has taken Official Notice. Applicants previously requested that a reference be provided supporting such a conclusion and that proper motivation be provided to support the conclusion that such a feature would be an obvious modification of the underlying primary reference. However, the Office Action similarly would appear to have disregarded this request, and merely repeated the previous rejection.

As noted to the Examiner, while "official notice" may be relied upon, as noted in MPEP §2144.03, these circumstances should be rare when an application is under final rejection or action under 37 CFR §1.113. Official Notice unsupported by documentary evidence should be only be taken by the Examiner where the facts asserted to be well known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known and only when such facts are of notorious character and serve only to "fill in the gaps" which might exist in the evidentiary showing made by the Examiner to support a particular ground of rejection.

Again, using the rejection of claims 26-27 as an example, the Examiner would appear to be relying on a broad concept that "partially and/or complete compensation are well known in the art," to support the obviousness rationale of modifying the underlying primary reference. This would appear to be contrary to the aforementioned guidelines, since such concepts are not instantly and unquestionably demonstrated and do more than just fill in the gaps. Further, as pointed out previously, Jolma et al. would only appear directed toward complete compensation, and it would appear contrary to purposely have less than full compensation when full compensation is available. So, it would not appear obvious to modify Jolma et al. to have this feature.

Further, in a previous response it was pointed out that the applicant should be presented with the explicit basis on which the Examiner regards the matter as subject to official notice sufficient to allow the applicant a proper opportunity to challenge that assertion. Again, Applicants have not been provided any support for these Official Notice statements.

Accordingly, the fact that support hasn't been provided should be further evidence that the underlying rejection is unsupported by the record.

## IX. Conclusion

In view of the law and facts stated herein, the Appellant respectfully submits that the Examiner has failed set forth a prima facie obviousness case against the pending claims.

For all the foregoing reasons, the Appellant respectfully submits that the cited prior art does not teach or suggest the presently claimed invention. The claims are patentable over the prior art of record and the Examiner's findings of unpatentability regarding claims 18-21 and 24-35 should be reversed and the patentability over the presently cited references be affirmed.

The Commissioner is hereby authorized to charge any additional fees required in connection with the filing of the Appeal Brief to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Dated: 7/30/04

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**X. Appendix**

1-17. (Previously Canceled)

18. A method for connection setup for mobile stations of a radio communication system having at least one base station, comprising:

recurrently offering frequency channels for a random access in an upstream direction for the mobile stations;

in the mobile station that requests a connection setup, measuring a reception power of a signal sent from the base station in a downstream direction; and

in the mobile station, setting a transmission power dependent on the measured reception power for sending an access radio block to the base station,

wherein codes are used to separate information of different connections between the base station and mobile stations,

wherein if the access radio block, sent to the base station, has not been successfully detected by the base station, a new access radio block is sent by the mobile station with increased power, and

wherein the signal transmitted in the downstream direction is a pilot signal.

19. The method according to claim 18, wherein the radio communication system is configured as a TDMA/CDMA radio communication system, plurality of connections between the mobile frequency channels information of different connections can be distinguished from one another according to a connection-individual code, whereby information is simultaneously transmitted between stations and the base station in time slots based on the information of the codes used to separate information of different connections.

20. The method according to claim 19, wherein the information of different connections are spread with the individual codes.

21. The method according to claim 18, wherein the mobile station sets the transmission power all the higher the lower the measured reception power is.

22. (Previously Canceled)

23. (Previously Canceled)

24. The method according to claim 18, wherein another signal transmitted in the downstream direction is a training sequence signal.

25. The method according to claim 18 wherein another signal transmitted in the downstream direction is a data signal.

26. The method according to claim 18, wherein the mobile station estimates a radio field attenuation in the downstream direction on the basis of the measured reception power and sets the transmission power such that the radio field attenuation is partially compensated.

27. The method according to claim 26, wherein the mobile station sets the transmission power such that the radio field attenuation is completely compensated.

28. The method according to claim 18, wherein at least one auxiliary information is inserted into the signal sent in the downstream direction, this being employed by the mobile station for setting the transmission power.

29. The method according to claim 28, wherein the auxiliary information is composed of an information about the transmission power used by the base station in the downstream direction.

30. The method according to claim 18, wherein a broadband frequency range is divided into sub-ranges having a narrower bandwidth within a frequency channel for the random access, the mobile station that requests the connection setup selecting a sub-range within said frequency channel, and the mobile station sending the access radio block to the base station in this sub-range.

31. The method according to claim 18, wherein the access radio block is not spread.

32. The method according to claim 18, wherein the access radio block is spread with an individual code.



33. A mobile station to which a connection setup is to be provided in a radio communication system having at least one base station, and wherein frequency channels are recurrently offered for a random access in an upstream direction for the mobile station, comprising:

- a measuring unit for measuring a reception power of a signal sent from the base station in a downstream direction when the mobile station requests a connection setup;

- a transmission power setting unit which, dependent on measured reception power, sends an access radio block to the base station; and

- a control panel for triggering the random access,

- wherein said measuring unit comprises a signal processing unit for measuring the reception power of the signal sent in the downstream direction from the base station and for generating the access radio block,

- wherein said transmission power setting unit comprises a control unit for setting the transmission power for the transmission of the access radio block to the base station dependent on the measured reception power,

- wherein codes are used to separate information of different connections between the base station and mobile stations,

- wherein if the access radio block, sent to the base station, has not been successfully detected by the base station, a new access radio block is sent by the mobile station with increased power, and

- wherein the signal transmitted in the downstream direction is a pilot signal.

34. A base station in a radio communication system wherein a connection setup occurs from mobile stations, and wherein the mobile station that requests a connection setup measures a reception power of a signal sent from the base station in a downstream direction, and wherein the mobile station sets a transmission power dependent on the measured reception power for sending an access radio block to the base station, comprising:

- a unit for recurrently offering frequency channels for a random access in an upstream direction for the mobile stations;

- a signal processing unit for generating the signal to be transmitted in the downstream direction; and

- a control unit for setting a transmission power for sending the signal to the mobile station that requests the connection setup,

- wherein codes are used to separate information of different connections between the base station and mobile stations,

wherein if the access radio block, sent to the base station, has not been successfully detected by the base station, a new access radio block is sent by the mobile station with increased power, and

wherein the signal transmitted in the downstream direction is a pilot signal.

35. A mobile station for transmission of data, block-by-block, to a base station on frequency channels, which are recurrently offered for random access, comprising:

a measuring unit for measuring a reception power of a broadcast signal transmitted by the base station, the broadcast signal being selected from the group consisting of a training sequence signal, a data sequence signal, a pilot signal and a control signal;

a transmitter to send an access radio block to the base station without a frequency channel having been previously allocated to the mobile station, the access block requesting a connection setup with the base station, the transmitter transmitting the access block to the base station on a random access channel; and

a power limiter to limit a transmission power of the access radio block before transmission of the access radio block such that the transmission power is reduced for a larger reception power and the power is increased for a lower reception power,

wherein codes are used to separate information of different connections between the base station and mobile stations,

wherein if the access radio block, sent to the base station, has not been successfully detected by the base station, a new access radio block is sent by the mobile station with increased power.